



CONSTRUCTION EQUIPMENT

549962 VOLVO L220H 3382 - DIESEL ENGINE



Sample No: VCP454859
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: 549962



SAMPLE INFORMATION

Sample Number	VCP454859	---	---	---
Sample Date	11 May 2024	---	---	---
Machine Hours	6129	---	---	---
Oil Hours	0	---	---	---
Oil Changed	Changed	---	---	---
Sample Status	ABNORMAL	---	---	---

COVANTA
 350 FLAKENBURG ROAD
 TAMPA, FL
 US 33619
 Contact: SERVICE MANAGER



OIL CONDITION

Visc @ 100°C	cSt	● 6.4	---	---	---
Base Number (BN)	mg KOH/g	■ 3.9	---	---	---
Oxidation (PA)	%	■ 104	---	---	---

T: (813)684-5688
 F:

Diagnosis

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. The copper level is abnormal. All other component wear rates are normal. Fuel content negligible. Elemental level of silicon (Si) above normal indicating ingress of dirt/seal material. The oil viscosity is lower than normal. Confirm oil type.



CONTAMINATION

Water	%	NEG	---	---	---
Soot %	%	■ 0.5	---	---	---
Nitration (PA)	%	■ 98	---	---	---
Sulfation (PA)	%	■ 78	---	---	---
Glycol	%	NEG	---	---	---
Fuel	%	■ 0.4	---	---	---
Silicon	ppm	▲ 82	---	---	---
Sodium	ppm	■ 4	---	---	---
Potassium	ppm	■ 12	---	---	---



WEAR METALS

Iron	ppm	■ 43	---	---	---
Copper	ppm	▲ 51	---	---	---
Lead	ppm	■ 4	---	---	---
Tin	ppm	■ 4	---	---	---
Aluminum	ppm	■ 6	---	---	---
Chromium	ppm	■ 2	---	---	---
Molybdenum	ppm	■ 93	---	---	---
Nickel	ppm	■ 2	---	---	---
Titanium	ppm	<1	---	---	---
Silver	ppm	■ <1	---	---	---
Manganese	ppm	■ 3	---	---	---
Vanadium	ppm	<1	---	---	---



ADDITIVES

Calcium	ppm	■ 1481	---	---	---
Magnesium	ppm	■ 399	---	---	---
Zinc	ppm	■ 1292	---	---	---
Phosphorus	ppm	■ 961	---	---	---
Barium	ppm	■ 0	---	---	---
Boron	ppm	■ 14	---	---	---

Depot: COVTAM
Unique No: 11035274
Signed: Doug Bogart
Report Date: 03 Jun 2024



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GRAPHS

